

HEVOLUTION

ADVANCING HEALTHSPAN FOR ALL

—

A Global
Call to Action

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THE TIME TO ACT IS NOW

The 20th Century saw tremendous gains in health across society. Medical advances including antibiotics and vaccines, combined with investments in food production technologies and sanitation led to a doubling of average human lifespan, and promise to lift the six billion inhabitants in developing countries to look forward to the same.

However, these hard-won additional years are frequently blighted with chronic disease and morbidity. In both developed and emerging countries, unhealthy longevity is weighing heavily on health systems, economies, and societies at large. Globally, disability adjusted life years, a metric that includes years of life lost to time lived in a state of ill health, increased by 32% between 1990 and 2019, and is expected to have increased by 55% between 2004 and 2030.¹²

It does not have to be this way. The outlook might seem gloomy, but projections are not laws. Growing older need not mean growing sicker, as evidenced by the large variation in biological age among elder people of similar chronological age. Demographic ageing does not inevitably cause an exponential rise in healthcare costs. On the contrary, adding one healthy year of life expectancy can boost annual GDP by about 4% for most countries, and could lead to annual gains of \$37trn in the US alone.³

Scientific breakthroughs are in sight. The science of healthy longevity is flourishing, thanks to innovations in science and medical research, new ways of understanding human biology, and developments at the critical interface of science, technology, computing and biology. The evidence base is also building rapidly, with most professionals in the healthy longevity field expecting a breakthrough in longevity research within the next 5 years.

Emerging markets are uniquely positioned to lead this transformation. Compared to more developed countries, emerging ones have both less legacy infrastructure and ingrained approaches, and more time before the massive demographic shift to grayer societies forces transition. With the right support, this gives them a unique opportunity to leapfrog, taking the best from developed market experience and becoming innovators in their own rights.

The decisions we make today will impact how the world responds to the healthy longevity challenge. Healthspan – a concept referring to years of life lived in good health, rather than simply being alive - is now moving into the mainstream as a powerful response to address our current unsustainable trajectory.

Advancing Healthspan requires leadership. Challenging norms and assumptions about biological ageing and emphasising preventative health insights are difficult enough in our sick-care oriented medical education and delivery model. We now have an urgent need to revise both thinking and curricula to focus on healthspan and healthy longevity, not just prevention and treatment. We need to harness the latest advances in technology and explore frontier research for chronic disease and drug development which can tackle the process of cell ageing itself. And we need society-wide reform, going far beyond biotechnology and healthcare actors, to include labour markets, advertising and branding, and education.

The shift required to achieve healthy longevity is both systemic and complex. It calls for new ways of thinking. But it can and must be achieved. And it will require action from all stakeholders.

1. Tang B, Li Z, Hu S, Xiong J. Economic Implications of Health Care Burden for Elderly Population. *Inquiry* 2022; 59: 469580221121511

2. Roser M, Ritchie H, Spooner F. Burden of Disease. How is the burden of disease distributed and how did it change over time? 2021. <https://ourworldindata.org/burden-of-disease> (accessed October, 2023).

3. Scott AJ. The longevity economy. *The Lancet Healthy Longevity* 2021; 2(12): e828-e35.

FOR GOVERNMENTS

Governments have everything to gain from a healthy longevity approach. For most countries, expanding healthspan by one year can increase GDP by about 4% - a tremendous boon for both health and prosperity. Capturing those opportunities requires a combination of leadership signaling and comprehensive policy design.

1 Make Healthspan a strategic priority at the national level

Set a goal to push back the onset of key age-related diseases by 5 years by 2040 across all income groups. The way to achieve this goal will differ by country, but all countries should ensure that equity issues are considered so that the healthspan dividend is shared by all of society.

Substantially increase funding into healthspan research and development. Despite being a critical field for the future of our healthcare ecosystems, healthspan research remains severely underfunded. Late-life morbidity accounts for more than half of healthcare spending in the US for instance, yet aging research represents less than 1% of NIH funding.

Promote a policy environment conducive to the development of the healthspan ecosystem. Addressing healthy longevity requires actions across multiple disciplines. Promoting intern-ministerial coordination will help increase policy coherence. Supportive, flexible and innovative regulatory environments will be needed to facilitate aging research and its applications. Regulation should also facilitate involvement of all actors, including non-profit.

2 Cooperate to put healthy longevity on top of the international agenda.



Leverage key platforms of change. Emerging markets hold the G20 presidency in 2024 (Brazil) and 2025 (South Africa), the Africa Union is now a permanent member, and the Kingdom of Saudi Arabia is an active promoter of the healthy longevity agenda. This is a unique opportunity for Emerging markets to take the lead. Creating a Healthy Longevity as a Working Group under the G20, for instance, would ensure that the implications of healthy longevity are annually explored across all key aspects of the economy.



Agree on common principles for the pursuit of longevity research. 96% of policy experts with knowledge in healthy longevity believe we need an international agreement on the ethics and practice of healthy longevity.



Include longevity considerations into the IMF Art IV country reviews. The implications of healthy longevity impact the entire economic system. Including longevity considerations into article IV reviews would enable to keep track of progress at the country level, while also helping to share best practices.

FOR INVESTORS

Longevity breakthroughs are in sight but they require capital to materialize at scale. Investors and philanthropists have a key role to play in that regard. Likewise, achieving healthy longevity will lead to important societal changes; adjustments that private sector players can help prepare for and accelerate to ensure we make the best of the healthy longevity dividend.



Be Bold

This is the best way to encourage breakthroughs. Moonshot approaches promoting high-risk, high-rewards strategies will create a strong pull factor and encourage innovation beyond the traditional walls of academia. Targeted investments in early-stage companies will help increase the pipeline of solutions. It will also be important to leverage the best of cutting-edge platforms, technologies, and biologic insights to reimagine how companies can develop drugs aimed at healthspan.



Be Strategic

Invest in companies targeting the underlying biology of aging and related diseases, focusing on solutions that are scalable across diverse geographic and economic contexts. Using patient-focused approaches will also be critical to align investment with health outcomes.



Be Flexible

Promote the use of blended finance strategies to accelerate the deployment of solutions into the market. Some healthy longevity solutions are entering commercial phase, but most have yet to enter or complete clinical trials. Blending finance sources between government, private and philanthropic sectors can be a powerful way to de-risk investments and accelerate the pipeline from lab to market. Investing in both early-stage startups and established companies will be another important way to diversify the portfolio.



Be Patient

Even under a favorable regulatory environment, collecting evidence of a healthy longevity impact will take time. Patient capital is thus key and committing to long-term funding beyond initial

FOR PRIVATE SECTOR ACTORS



Set corporate targets for healthy longevity. These should be part of the general corporate goals and reported as such. Examples of targets could include setting a goal for the share of the workforce aged above 50 or development of age-friendly work arrangements to facilitate greater engagement of and contribution from the senior workforce.



Ensure health coverage includes preventive medicine. This will ensure employees are healthier and more productive.



Promote products in an age-neutral manner. This will increase the consumer base and help focus advertising on the product's added value rather than on the assumed target group.

FOR RESEARCHERS AND SCIENTISTS

Science is an essential part of solving the healthy longevity equation. It is a growing and fascinating field of research – one that both leverages traditional scientific domains of biology, chemistry and medicine as well as new technologies such as AI. But efforts beyond the healthcare space will also be needed, notably on advancing our detailed understanding of the economic implications of and investment case for healthspan.

Take a strategic approach to biomarkers: biomarkers are crucial for objectively measuring aging and the effectiveness of interventions, offering a scientific foundation for healthspan advancements. A multi-dimensional biomarker approach will help provide a more comprehensive understanding of aging.

Invite new disciplines and younger scientists to participate in healthspan research. This will create new ideas, help develop new approaches, and ensure continued innovation in the field.

Devise ways to legally share information or otherwise collaborate on the safety of therapeutics pre-market, while still competing on efficacy. Global collaboration enhances knowledge sharing and resource utilization. Sharing safety data, for example, could save time, energy, and resources with the effect of accelerating innovation and shortening the path to market. The result would be safer therapies and avoidance of unnecessary duplication of research.

Create a 'Stern Review' for healthspan. A clear, detailed and articulated analysis of the economic implications of healthspan will be critical for making mobilizing action and give governments the confidence to make those investments. Creating an international commission of economists to undertake this study will help give the results international legitimacy and impact needed.

HEALTHCARE AND ALLIED HEALTHCARE PROFESSIONALS

Embed healthspan in curricula and training programs for medical professionals. Medical professionals are not taught enough about preventive approaches or about the impact that nutrition, sleep, and stress can have on healthspan. Embedding healthspan science in curricula and training programs will ensure the next generation of medical professionals is equipped to deliver the personalized medicine advances currently in the works.

Harness technology to usher the age of Medicine 3.0, ensuring both the technology and the delivery of the healthspan services are inclusive. Technology is critical to a personalized approach to medicine, but it can only deliver it if its underlying datasets and algorithms represent the wide diversity of the people that need to be treated.

Promote a lifelong, personalized approach to healthspan care. To do so effectively, healthspan services will need to be cognizant of local culture, values and practices. Leveraging insights from behavioral interventions in other industries will also be key in helping patients take ownership of their own health.

OUR HEVOLUTION COMMITMENT

To support the above efforts and catalyze a shift from lifespan to healthspan, Hevolution foundation will:



Grow the international healthspan research community by providing research funding for ageing science and grants to increase the talent pool working in the space.



Accelerate the deployment of solutions to the market by bringing investors together to mobilize capital, including through the Breakthrough Innovation Alliance.



Promote Bold Breakthroughs in Healthy longevity through the support of High-risk/High rewards strategies, including through the \$101 million X-Prize on healthy longevity that was launched at Hevolution's inaugural Global Healthspan Summit.



Ignite a global movement around healthspan for all, by acting as a global convenor for the healthspan community and working with research institutions, investors, companies, governments, and civil society to create positive change.



Engage cutting-edge research in ageing science by setting up an intramural research program.



Bring the latest science to the people by establishing healthy longevity clinics, first in KSA then throughout the world.

To learn more about how to join the global healthspan movement, follow us on social media



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